STORY 6

State-Owned Companies Transitioning Away From Coal Mining and Coal-Fired Power

Shift SOE investment from fossil fuels to renewables

FEATURED COUNTRIES



INDIA
CHINA
SWEDEN

Key numbers

USD 286 billion in the G20

This was the annual average value of state-owned enterprise (SOE) investment in oil, gas and coal production (including fossil-fuel-based power) in 2013 and 2014 (Bast et al., 2015).

USD 12 billion to coal

Of the USD 286 billion in SOE investments, USD 12 billion went to coal mining and coal-fired power (Bast et al., 2015).

FEATURED REFORMS AND THEIR PERIOD

- Transition of SOEs away from coal mining and coal-fired power and towards cleaner energy between 2014 and 2018

STAGES OF FOSSIL FUEL LIFE CYCLE

- Exploration – Development – Extraction – Electricity Generation

SECTORS AFFECTED BY REFORM

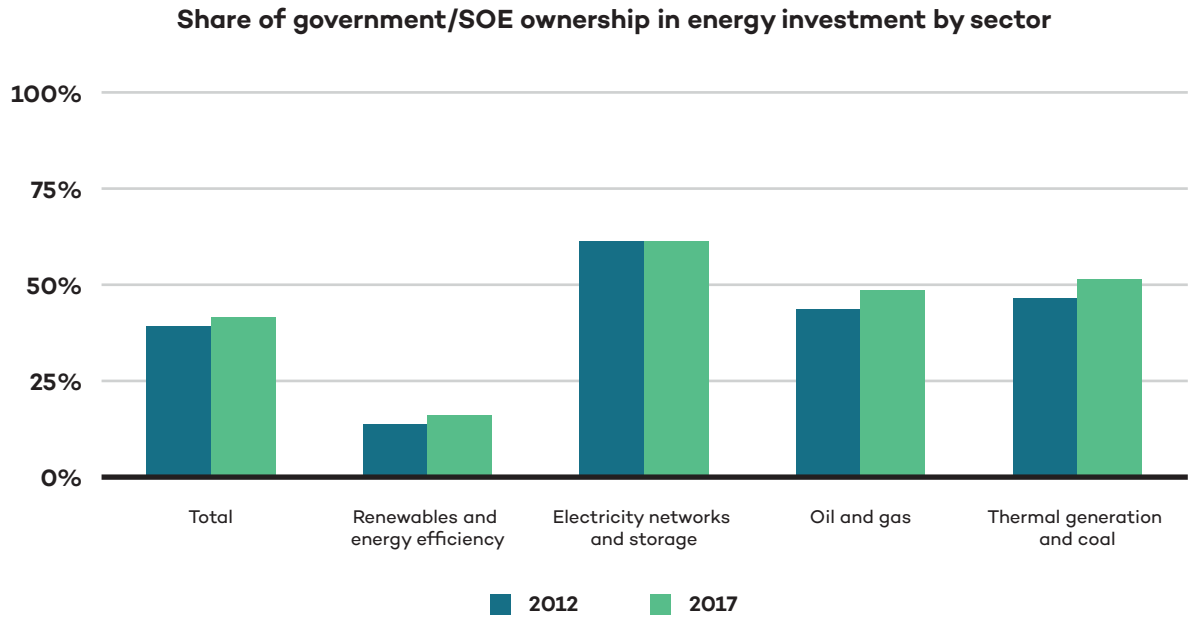
- Coal mining
- Power production

Context

The majority government ownership of SOEs provides a degree of effective control and government involvement in decision making and financing. SOEs may benefit from several advantages that are linked to their state ownership and close proximity to government, including price support, preferential financing rates and low return expectations, implicit or explicit state guarantees, grants, direct subsidies from the government budget, tax concessions, in-kind subsidies, privileged access to information, regulatory exemptions, preferential treatment of public procurement, commercial diplomacy support and other forms of support (Prag, Röttgers, & Scherrer, 2018). While these forms of support vary by country and institution, the impact is nonetheless significant.

Over half of the G20 countries support fossil fuel production through one or more SOEs (Bast et al., 2015). Examples of SOE investments in fossil fuels include: research and development for new exploration technologies and processes, equipment for operation and maintenance, and infrastructure that specifically benefits fossil fuel production and fossil-fuel-based power projects both domestically and abroad.

Governments and SOEs are major players in fossil fuel markets and were estimated to own roughly 60 per cent of coal mines and coal power plants globally (Nelson et al., 2014). The International Energy Agency (IEA) finds that, between 2012 and 2017, the share of global energy investment driven by SOEs increased to 42 per cent, with public sector investors found to be "more resilient" to changes in the markets for oil, gas and thermal power (IEA, 2018).



Source: IEA, 2018.

Drivers of reform

The International Renewable Energy Agency (IRENA) has estimated that all renewable electricity technologies will be cost competitive with, or even undercut, fossil fuels as early as 2020 (IRENA, 2018). This competition with increasingly low-cost renewables is especially intense for coal, the global demand for which stagnated in 2014–2016 (IEA, 2017). In addition to the cost competitiveness of alternatives, the fall in production and use of coal is being driven by constraints linked to climate and wider environmental policy linked to air pollution. The IEA estimates that, to keep the global temperature increase well below 2°C, coal-fired power plant emissions must be reduced by more than half globally by 2030 (IEA, 2018). That is why this story focuses specifically on SOEs in the coal mining and coal power sectors.

Change in the mechanisms of government support to coal

There are some initial signs that some coal SOEs are aware of the need of to diversify their business, increase investment in renewables and begin to plan for the longer-term full transition away from coal mining and coal-fired power.

CHINA

The China Energy Investment Corporation (CEIC) is the world's largest power company by installed capacity (225 GW), based on the recent merger of a large state-owned power company (China Guodian Corp.) and a large state-owned power and mining company (Shenhua Group) (Buckley & Nicholas, 2017). The generation capacity of the merged company will include 23 per cent from renewables, including hydropower projects. Some believe this merger and reconstruction will be an example for SOE reform and is a signal that China is serious in its policy initiatives about lowering its reliance on coal as it expands renewables, gas, hydro and nuclear capacity (Asia Times, 2017; Buckley & Nicholas, 2017).

INDIA

Coal India Limited (CIL), the world's largest coal miner, stated in its most recent long-term plan that "in view of the likely demand (base case scenario), there is limited requirement of starting new coal mines except the ones already auctioned/allocated" (Coal India Limited, 2018). CIL's *Coal Vision 2030* report notes that cheap solar power, climate commitments and economic factors are likely to have "significant impacts" on the coal sector, with demand "likely to decrease substantially" (Coal India Limited 2018). In 2018 CIL announced plans to set up 20,000 megawatts (MW) of solar projects over the next 10 years (Bhaskar, 2018).

SWEDEN (G20 MEMBER VIA THE EU)

Although fully owned by the Government of Sweden, Vattenfall has generation assets in Finland, Denmark, Germany, Poland and the Baltic countries, among others. In 2010 Vattenfall's board adopted sustainability targets that included reducing carbon dioxide emissions by more than 30 per cent by 2020. As part of efforts to meet the targets, in 2014 Vattenfall's management decided to divest its lignite mines and associated power plants in eastern Germany (Prag et al., 2018). Vattenfall's growth investments for 2018/19 are focused on wind power, solar, decentralized solutions, energy storage and e-mobility (Vattenfall, n.d.).

Complementary policies

In some cases, SOEs are an extension of the state, with social as well as economic goals (Bridle, Kitson, Duan, Sanchez, & Merrill, 2017). For that reason, complementary policies to support the transition of SOEs away from fossil fuel production and fossil-fuel-based power will likely be linked to parallel (and ideally complementary) initiatives at a regional or national level through social protection, economic diversification, retraining, etc.

Based on research in the major coal-producing region of Shanxi in **China**, the Global Subsidies Initiative (GSI) has found that SOEs may be already responsible for key tools of social protection, including managing pensions and medical bills for all retired staff and registered workers. SOEs can therefore play a key role in creating jobs for former fossil fuel industry employees, including through a transfer to another post within an SOE or giving them time to find alternative employment (Bridle et al., 2017).

In some countries SOEs have an even wider role in society through developing agricultural businesses and providing services and resources such as schools, housing, hospitals and other infrastructure necessary for employees and their families (Bridle et al., 2017). One option as part of the transition may be to separate the social responsibilities from SOEs' operation and reduce the burden on the SOEs by transferring these services to local, state/provincial or regional government.

Wider benefits of the reform

Overall, SOEs have rapidly increased their investments, including in solar photovoltaic, wind, small-scale hydro, geothermal, biomass and marine energy. Between 2000 and 2014, unlisted SOEs and governments increased their yearly capacity additions of renewables (excluding large hydro and nuclear) from 9 per cent to 23 per cent (Prag et al., 2018). Early results of a study carried out by the OECD suggest that SOE ownership has a positive effect on investment in the renewable electricity generation sector in OECD and G20 countries. This effect could be due to a number of reasons, including SOEs being influenced by government mandates to advance their decarbonization strategies or due to preferential financing terms potentially available to SOEs (Prag et al., 2018). This highlights the potential for SOEs to play a critical role in the energy transition globally, not only in the context of coal, but also in the transition away from oil and gas (see last section).

Watching brief

Despite the early signs of a transition away from coal mining and coal-fired power domestically, China's state-owned power companies are pursuing an aggressive overseas expansion strategy, investing in the construction and operation of energy networks in some countries and as equity investors in others (Financial Times, 2018). Although Chinese investments abroad include finance for renewables, by one estimate, Chinese firms are involved in the construction, ownership or financing of at least 16 per cent of all coal-fired power stations under development outside of China (Shearer, Mathew-Shah, Myllyvirta, Yu, & Nace, 2018).

Other sectors and countries that implemented similar reforms

In addition to the initial transition seen in SOEs shifting away from coal mining and coal-fired power, there are some early examples of SOEs taking initial steps to plan for the parallel move away from oil and gas production.

The Saudi Vision 2030 identifies risks and opportunities in the transition to a less oil-dependent **Saudi Arabia**, and the CEO of Saudi Aramco has stated that, "instead of looking at crude oil as the only economic engine, [the government is] looking at multiple engines and that is something good" (Financial Times, 2017). **Norway**'s state-owned oil company, Statoil, recently renamed itself Equinor to reflect that they are becoming a broad energy company likely faced with "increasingly stringent regulations and taxes on carbon emissions in the future," rather than one solely focused on oil and gas (Equinor, 2018). Even more significantly, in **Denmark**, the former Danish Oil and Natural Gas company (DONG) has divested entirely from oil and gas production and transformed into a state-owned renewable energy company (Orsted, n.d.).

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IISD International Institute for Sustainable Development

Global Subsidies Initiative

ODI Evidence. Ideas. Change.

OILCHANGE INTERNATIONAL

FARN FUNDACIÓN AMBIENTE Y RECURSOS NATURALES